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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,318	10/14/2003	Xinggao Fang	5682A	5027

7590 08/25/2006

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EXAMINER
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MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/685,318	<b>Applicant(s)</b> FANG ET AL.	
	<b>Examiner</b> Matthew D. Matzek	<b>Art Unit</b> 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10-12, 14-16, 18-23, 25-32 and 35 is/are pending in the application.
- 4a) Of the above claim(s) 12, 14-16, 18-23, 25-32 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. The amendment dated 6/1/2006 has been fully considered and entered into the Record. The exhibits provided by Applicant have also been considered and entered into the Record. Claims 1-8, 10 and 11 are currently rejected and claims 12, 14-16, 18-23, 25-32 and 35 are currently withdrawn.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-3, 5-8, and 11 rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 6,251,210).

a. Bullock et al. disclose a treated textile fabric comprising two chemical treatments with the primary treatment comprising at least about 5 weight percent of a fluorochemical and the secondary comprising the same composition as the primary except the fluorochemical comprises at least about 4 weight percent of the composition (Abstract). The Examiner takes the position that less than about 4 weight percent (Applicant) and at least about 4 weight percent (Bullock et al.) both extend beyond the value of 4 percent: 4.1 % for Applicant and 3.9% for Bullock et al. Therefore, the applied art anticipates the instantly claimed fluorochemical level. The primary treatment may also contain one or more antimicrobial agents, fluoropolymers, and cross-linked resins (col. 4, lines 42-44, col. 12, lines 7-31). The fluorochemicals provide water repellance and stain resistance (col. 12, lines 9-14). The applied patent teaches that the preferred latex component of the

primary fluorochemical treatment may comprise acrylate copolymers and terpolymers of methylacrylate (col. 11, lines 17-49).

- b. Claims 5 and 6 are rejected as the applied patent discloses that the anti-microbial agent may be “any substance or combination of substances that kills or prevents the growth of a microorganism and includes antibiotics, antifungal, antiviral, and antialgal agents, which includes triclosan and ZINC OMADINE<sup>TM</sup> (col. 11, lines 50-59). Zinc pyrithione is the generic name for ZINC OMADINE<sup>TM</sup>.
  - c. The crosslinking resins and the associated crosslinkers of the instant application are disclosed by the applied patent (col. 12, lines 25-41).
  - d. Claim 11 is rejected as the secondary coating is to be applied to only one side of the fabric (Abstract).
3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (US 6,251,210) as applied above to claim 8 and further in view of Fitzgerald et al. (US 6,451,717 B1).
- a. Fitzgerald et al. disclose an aqueous emulsion for imparting oil and water repellency to textiles comprising an aromatic blocked isocyanate and fluoropolymer (Abstract). The applied patent teaches the use of fluoropolymers that include perfluoroalkyl groups connected to polyurethane or (meth)acrylate groups (col. 1, lines 60-67). “(Meth)acrylate is to include methacrylate, acrylate, or a combination of these groups (col. 1, line 67 – col. 2, line 2).

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- b. Since both Bullock et al. and Fitzgerald et al. are both from the same field of endeavor (i.e. oil and water repellant coated fabrics), the purpose disclosed by Fitzgerald et al. would have been recognized in the pertinent art of Bullock et al.
  - c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Bullock et al. with the fluoropolymers of Fitzgerald et al. The skilled artisan would have been motivated by the desire to make a treated textile product with oil and water repellency properties.
4. Claims 1-4, 7, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linert et al. (US 2003/139521 A1).
- a. Linert et al. teach a fluorochemical composition to render a fabric; oil and/or water repellant comprising not more than 4% fluoropolymer such as fluorinated ester, blocked isocyanates, fungicidal agents (Abstract, [0071-73]). The applied publication is silent as the hydrophobicity of the disclosed crosslinking components, however as the invention is directed for use as a stain and water repellant textile fabric it is reasonable to presume that the crosslinking agents taught by Linert et al. are hydrophobic. The applied article is silent to the incorporation of an antimicrobial agent. It would have been obvious to one of ordinary skill in the art to have used an antimicrobial agent in the incorporation of the article of Linert et al. as the article already includes a fungicide and an antimicrobial agent would provide greater resistance to unwanted contamination and growth.
  - b. Although Linert et al. do not explicitly teach the claimed feature of a stain release value to corn oil and tanning oil or burned motor oil of at least about 3 and exhibits

inhibition of microbial growth upon the textile, it is reasonable to presume that said properties are inherent to Linert et al. Support for said presumption is found in the use of like materials (i.e. a textile with a common fluorochemical coating). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a stain release value to corn oil and tanning oil or burned motor oil of at least about 3 and exhibits inhibition of microbial growth upon the textile would obviously have been present on the Bullock et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner, et al.* (CCPA) 186 USPQ 80.

#### ***Double Patenting***

5. Claims 1-8, 10 and 11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 24-25, 39-34; 1-70; 1-21 of copending Application Nos. 10/659,900; 10/785,218; 10/780,976. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the applications are directed to fluorochemically-treated fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Response to Arguments***

6. Applicant's arguments filed 6/1/2006 have been fully considered but they are not persuasive.

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7. Applicant argues that Bullock et al. fail to disclose a hydrophobic crosslinking agent.

The applied reference provides for crosslinking epoxides, which are hydrophobic (col. 17, lines 33-58). In this Office Action, Examiner has removed mention of the applied reference's use of unblocked polyisocyanates.

8. Applicant argues that Examiner has misinterpreted Bullock et al. and that the applied reference fails to teach a concentration of less than about four weight percent of the fluorochemical-containing soil release component based upon the weight of the treating composition. The applied reference provides for two separate coatings for the textile fabric. The secondary comprising the same composition as the primary except the fluorochemical comprises at least about 4 weight percent of the composition (Abstract). The Examiner takes the position that less than about 4 weight percent (Applicant) and at least about 4 weight percent (Bullock et al.) both extend beyond the value of 4 percent: 4.1 % for Applicant and 3.9% for Bullock et al. Therefore, the applied art anticipates the instantly claimed fluorochemical level.

9. Applicant argues that Linert et al. fail to teach a fluorochemical-containing soil release component, and in particular any of those set forth in instant claim 2. Linert et al. teach a fluorochemical composition to render a fabric; oil and/or water repellant comprising not more than 4% fluoropolymer such as fluorinated ester, blocked isocyanates, fungicidal agents (Abstract, [0071-73]). Paragraph 0072 in particular, mentions the use of blocked isocyanates and the particular fluorochemicals as claimed in instant claim 2 are provided for in paragraph 0084.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

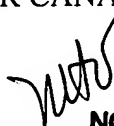
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**NORCA TORRES**  
**PRIMARY EXAMINER**

mdm

MDM